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H01L 21/76(21) Application number: **61148509**(71) Applicant: **NEC CORP**(22) Date of filing: **24.06.88**(72) Inventor: **HANEDA HISASHI**(54) **DIELECTRIC ISOLATION TYPE
SEMICONDUCTOR DEVICE**

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(57) Abstract:

PURPOSE: To prevent the warp of substrate in a dielectric isolation type semiconductor device from occurring by a method wherein a twolayered film comprising a silicon nitride film or a silicon oxide film and another silicon nitride film is provided on the surface of polycrystalline silicon substrate exposed to the parts between single crystal silicon island regions.

CONSTITUTION: Multiple single crystal silicon island regions 2 isolated by dielectric films 1 comprising SiO_2 etc. are arranged on a polycrystalline silicon substrate 3. Silicon nitride films 5 as oxidation resistant films are provided on the parts exposed to both the surface and back surface of polycrystalline silicon substrate 3 to prevent any warp due to oxygen permeated during thermal oxidizing process from occurring. Through these procedures, the silicon nitride films 5 on the surface can prevent oxygen from permeating into the polycrystalline from the surface of substrate 3 to avoid the warp of substrate 3.

